# Seong-Hyun Nam

The University of North Dakota Management Email: snam@business.und.edu

### Education

Ph D, University of Wisconsin - Milwaukee, 1997.

Major: Operations and Supply Chain Management

Supporting Areas of Emphasis: Operations and Supply Chain Management

Dissertation Title: "Dynamic Regulation of Manufacturing Quality Diffusion Under Uncertain

Exogenous Influences."

MA, University of Wisconsin - Madison, 1991.

Major: Mathematics

MS, University of Wisconsin - Madison, 1986.

Major: Statistics

BS, Sung Kyun Kwan University, Korea, 1981.

Major: Mathematics

# **Academic, Military and Professional Positions**

### **Academic**

Professor, University of North Dakota. (August 15, 2012 - Present).

Associate Professor, University of North Dakota. (August 2005 - August 2012).

Assistant Professor of Management, University of North Dakota. (August 1999 - August 2005).

Instructor, Faculty of Operations Management, University of Wisconsin-Milwaukee. (1997 - 1999).

#### **Professional**

Inventory Manager, Star Beauty Co. (January 1992 - December 1996).

## **Professional Memberships**

National Business and Economics Society. (January 2015 - November 2015).

INFORMS. (January 1, 2006 - December 31, 2014).

### **Development Activities Attended**

Workshop, "Breeze Presenter Workshops," UND, Grand Forks. (January 24, 2007).

### **TEACHING**

# **Teaching Experience**

### The University of North Dakota

Management 301, Operations Management, 47 courses.

Management 309, Quantitative Methods for Mgrs, 17 courses.

Management 395, Special Topics, 1 course.

Management 431, Supply Chain Management, 9 courses.

Management 501, Quant Analys for Mgmt Decis, 20 courses.

Management 575, Special Topics, 2 courses.

### **Non-Credit Instruction**

Guest Lecture, University of Shanghai for Science and Technology and UND, 98 participants. (May 2015 - June 2015).

Review Course, 6 participants. (February 28, 2009 - December 5, 2014).

Guest Lecture, University of Shanghai for Science and Technology, 89 participants. (May 2014 - June 2014).

Guest Lecture, University of Shanghai for Science and Technology, 82 participants. (May 2012 - June 2012).

Guest Lecture, University of Shanghai for Science and Technology, 72 participants. (May 9, 2010 - June 11, 2010).

# **Directed Student Learning**

Directed Individual/Independent Study, "Independent study", Management. (January 19, 2009 - May 17, 2009).

Advised: Junjie Zhao

### Awards and Honors

UND's faculty "star", University of North Dakota. (January 8, 2010).

### RESEARCH

# **Published Intellectual Contributions**

### **Book Chapters**

Kurata, H., Nam, S.-H. (2014). In John Wang (Ed.), Freshness Management in the Retail Business (1st ed., vol. 2, pp. 426-445). Hershey, PA: Encylopedia of Business Analytics and Optimazation. http://www.igi-global.com/book/encyclopedia-business-analyticsoptimization/90651

Nam, S.-H., Vitton, J., kurata, H. (2010). *A Determanation of the Optimal Level of Collaboration Betweena Contractor and its Suppliers under Demand Uncertainty* (vol. The supply chain in manufacturing, distribution, and transportation: Modeling, Optimization, and Application, pp. 97-120). New York: CRC Press, Taylor & Francis Group.

#### **Refereed Journal Articles**

Helleloid, D., Nam, S.-H., Schultz, P., Vitton, J. (2015). The U.S. Airline Industry in 2015. *Journal of The International Academy For Case Studies*, 21(5), 113-125.

Helleloid, D., Vitton, J., Nam, S.-H. (2015). The Rise and Decline of an American Icon: Montgomery Ward Company. *Academy of Business Research Journal*, 1(2015), 7-25.

- Valentine, S., Nam, S.-H., Hollingworth, D., Hall, C. (2014). Ethical Context and Ethical Decision Making: Examination of an Alternative Statistical Approach for Identifying Variable Relationships. *Journal of Business Ethics*, *124*(3), 509-526.
- Vitton, J., Nam, S.-H. (2013). If you're Out of Schlitz, You're Out of Beer! *Journal of Critical Incidents/The Society for Case Research*, *6*, 110-116.
- kurata, h., Nam, S.-H. (2013). After-sales Service Competition in a Supply Chain: Does Uncertainty Impact on the Inconsistency between Profit Maximization and Customer? *International Journal of Production Economics*, 144(1), 268-280.
- Nam, S.-H., Vitton, J., KURATA, H. (2011). Robust Supply Base Management: Determining the Optimal Number of Suppliers Utilized by Contractors. *International Journal of Production Economics*, 134, 333-343.
- Nam, S.-H., KURATA, H., Vitton, J., Park, J. (2010). Determining Optimal Price and Order Quantity under the Uncertainty in Demand and Supplier Price. *International Journal of Information Systems and Supply Chain Management*, *3*(4), 1-24.
- Nam, S.-H., Kurata, H. (2007). Impact of a Loss Leader Strategy on Supply Chain Pricing and Stocking. *Yokohama Business Review*, 2(28), 141-162.
- Park, J., Nam, S.-H. (2006). Teaching Lot-Sizing Decisions: A Spreadsheet/Mixed-Integer Programming Approach. *Decision Science Journal of Innovative Education, Vol. 4*(No.1, Jan. 2006), pp163-167.

# **Presentations Given**

- Nam, S.-H. (Author Only), 2016 Hawaii Global Conference on Business and Finance, "A Joint Decision-Making Model to Determine the Optimal Level of Supply Chain Coordination under Demand Uncertainty with Commitment-Option Contracts," The Institute for Business and Finance Research, Hawaii. (January 4, 2016).
- Nam, S.-H. (Presenter & Author), National Business and Economics Society Sixteenth Annual Conference, "Determining the Optimal Number of Long-Term Contractual Suppliers based on Demand Forecasting Adjustment and Expected Risk Management Cost," National Business and Economics Society, Panama city. (March 14, 2015).
- Nam, S.-H. (Presenter & Author), INFORMS Annual Meeting 2013, "Determining the Optimal Number of Suppliers in Global Supply Chain Networks under Supply Disruption," INFORM, Minneapolis. (October 8, 2013).
- Nam, S.-H. (Presenter & Author), National Business & Economics Society: 14th Annual Conference, "Determining the Optimal Number of Suppliers under Risk of Disruption," National Business and Economic Society, Costa Rica. (March 7, 2013).
- Nam, S.-H. (Presenter & Author), The 2012 National Business and Economic Society annual conference, "Freshness management in retail business," National Business and Economic Society, Maui, Hawaii. (March 12, 2012).
- Nam, S.-H. (Presenter & Author), INFORMS Annual Meeting, "Measuring the Bullwhip Effect in the Supply Chain Based on the Demand Forecasting Coordination Level," Institute for Operations Research and the Management Sciences, Austin, TX. (November 9, 2010).

- Nam, S.-H. (Presenter & Author), INFORMS Annual Meeting, "An optimization model for reducing coordination costs in a supply base," Institute for Operations Research and the Management Sciences, San Diego. (October 14, 2009).
- Nam, S.-H. (Presenter & Author), INFORMS Annual Meeting, "Procurement Contracts for Supply Chain Considering Decision Makers' Risk Attitudes," Institute for Operations Research & the Management Sciences, Washington DC. (October 5, 2008).
- Nam, S.-H. (Presenter & Author), INFORMS Annual Meeting, "Determining the Optimal Number of Suppliers in Supply Base under Long Term Contract," Institute for Operations Research and the Management Sciences, Seattle, Washington. (November 7, 2007).

# **Contracts, Grants and Sponsored Research**

#### Grant

- nam, seong-hyun (Principal), "Scholarly Activities Travel Grant," The University of North Dakota, \$420.00. (January 2016 February 2016).
- Nam, Seong-Hyun (Principal), "New Course Development," Sponsored by UND, The University of North Dakota, \$1,000.00, Funded. (August 2015 December 2015).
- nam, seong-hyun (Principal), "CoBPA 2014 Summer Research Grant," Sponsored by CoBPA, The University of North Dakota, \$2,500.00, Currently Under Review. (May 2014 December 2014).
- Nam, Seong-Hyun (Principal), "Summer Instructional Development Mini Project," The University of North Dakota, \$1,500.00, Funded. (July 1, 2009 January 31, 2010).
- Hollingworth, David (Co-Principal), Nam, Seong-Hyun (Co-Principal), "development of a major in Operations and Supply Chain Management.," Sponsored by OID, The University of North Dakota, \$3,000.00. (July 2006 December 2006).

### **Sponsored Research**

- Nam, Seong-Hyun (Principal), Butz, Nikolaus T (Supporting), "Summer 2013 Graduate Research Professorship," Sponsored by Graduate School, The University of North Dakota, \$7,000.00, Funded. (June 1, 2013 November 20, 2013).
- Nam, Seong-Hyun (Principal), "CoBPA Summer Research Grant," Sponsored by College of Business & Public Administration, \$2,500.00, Currently Under Review. (June 2009 May 2010).
- Nam, Seong-Hyun (Principal), "Summer Research Grant," Sponsored by College of Busuness and Public Administration, The University of North Dakota, \$2,500.00, Currently Under Review. (May 15, 2006 March 14, 2007).

### **Awards and Honors**

Scholarly Activities Travel Grant, UND. (February 2015).

CoBPA 2014 Summer Research Grant, CoBPA. (May 2014).

Summer 2013 Graduate Research Professorship, University of North Dakota. (May 1, 2013).

Scholarly Activities Travel award, University of North Dakota. (October 6, 2008).

### Intellectual Contributions in Submission

### **Refereed Journal Articles**

Vitton, J., Nam, S.-H., Schultz, P. Continental Airlines in 2009. Business Case Journal.

# **Research Currently in Progress**

"A Global Sourcing Strategy with the Optimal Number of Suppliers and the Optimal Contract Term under Supplier Uncertainty" (Writing Results). Over the past several decades, many manufacturers and buying firms have decided to pursue lower unit costs through such initiatives as just-in-time replenishment, reduced supply bases, and the use of low cost international suppliers, often without evaluating the full cost of risks and uncertainties related to those changes. As a result, today's ultra-lean and globallyextended supply chains may have many additional issues that could lead to potential failure. To resolve this problem, we investigate various types of risk and uncertainty inherent in global supply bases and then attempt to develop an optimal control model to effectively deal with supplier uncertainty and mitigate the risk of disruption in a global supply chain. Specifically, in the modeling process, three key issues are considered: (1) the collective risk of "supply-side" uncertainty in the global environment marked by high volatility and ambiguity, (2) the resulting total management cost associated with supplier uncertainty, transaction, supplier responsiveness, and supplier innovation, and (3) the optimal number of suppliers with the optimal contract duration, for the purpose of achieving supply chain profit maximization. In this study, we also convert the stochastic optimal control model to an ordinary optimal control framework, which is a unique approach that enables us to obtain the closed form of optimal solution.

"The Decline and Demise of Montgomery Ward" (Writing Results).

This case study describes the early success of Ward's through catalogue sales, the Internet of the 19th Century. This wa followed by a policy of standing still while rivals expanded into shopping malls in the U>S> suburbs. The 128 year old American Iconfailed in 2000.

### **SERVICE**

### **Editorial and Review Activities**

- Invited Manuscript Reviewer, "Optimal number of suppliers to mitigate supply disruption," OPSEARCH, 1 review. (March 16, 2016 May 16, 2016).
- Editorial Board Member, "Mobile learning key influencing factors adoption based on analytic hierarchy process," International Journal of Information and Decision Science, 1 review. (February 23, 2016 March 29, 2016).
- Invited Manuscript Reviewer, "Buffer Space Hedging and Coordination in Prefabricated Construction Supply Chain Management.," International Journal of Production Economics, 1 review. (January 8, 2016 March 8, 2016).
- "Price and Service Competition with Maintenance Service Building.," Journal of Systems Science and Systems Engineering, 3 reviews. (January 8, 2016 February 4, 2016).
- Invited Manuscript Reviewer, "Production and procurement strategies for seasonal product supply chain under yield uncertainty with commitment-option contracts," International Journal of Production Economics, 1 review. (October 4, 2015 November 14, 2015).

- Invited Manuscript Reviewer, "Reliable Flow in Forward and After-sales Supply Chains Considering Propagated Uncertainty," Transportation Research Part E: Logistics and Transportation Review, 1 review. (August 24, 2015 October 2, 2015).
- Invited Manuscript Reviewer, "Managing Supply Uncertainty under Supply Chain Cournot Competition.," European Journal of Operational Research, 2 reviews. (July 3, 2015 August 14, 2015).
- Editorial Board Member, "The Operational Determinants of Hospitals' Inpatients Departments Efficiency in Jordan," International Journal of Operational Research, 1 review. (March 2, 2015 April 10, 2015).
- Invited Manuscript Reviewer, "Fundamentals of Supply Chain Management," McGraw Hill Education, 16 reviews. (March 1, 2015 April 6, 2015).
- Invited Manuscript Reviewer, "Managing Operations and Supply Chains: Opportunities and Challenges," SAGE Publications, 6 reviews. (December 12, 2014 January 19, 2015).
- Invited Manuscript Reviewer, "Managing Supply Uncertainty under Supply Chain Cournot Competition," European Journal of Operational Research, 1 review. (October 18, 2014 November 15, 2014).
- Invited Manuscript Reviewer, "Price and Service Competition with Maintenance Service Bundling," Journal of Systems Science and Systems Engineering, 1 review. (October 4, 2014 October 31, 2014).
- Editorial Board Member, "Comparing the Effectiveness of Intentional Preferences versus Preferences over Specific Choices: A User Study," International Journal of Information and Decision Sciences, 1 review. (September 23, 2014 October 19, 2014).
- Invited Manuscript Reviewer, "Designing and Managing a Base Product, Optional Items, and After-sales Services When Customers Prefer Overspec Products.," European Journal of Operational Research, 1 review. (May 15, 2014 June 18, 2014).
- Ad Hoc Reviewer, Papers, "Service competition in a supply chain with two retailers under service level sensitive retail price and demand," International Journal of Management Science and Engineering Management, 1 review. (September 5, 2013 November 28, 2013).
- Ad Hoc Reviewer, Papers, "Managing supply uncertainty under chain to chain competition," European Journal of Operational Research, 1 review. (May 15, 2013 July 9, 2013).
- Editorial Board Member, "Multi objective constrained optimization of Data Envelopment Analysis by Differential Evolution," International Journal of Information and Decision Science, 2 reviews. (May 7, 2013 June 7, 2013).
- Editorial Board Member, "Mail-in-rebate coupled with revenue sharing and downward direct discount for supply chain coordination," International Journal of Operational Research, 1 review. (April 15, 2013 May 12, 2013).
- Editorial Board Member, "Relationship Between Information Richness and Exchange Outcomes: Moderating Effects of Media Richness and Governance Mechanisms," International Journal of Information System and Supply Chain Management, 1 review. (February 13, 2013 March 18, 2013).

- Editorial Board Member, "Centralize vs Decentralize Analysis for Supply Chain," International Journal of Information System and Supply Chain Management, 1 review. (February 16, 2013 March 16, 2013).
- Editorial Board Member, "A Survey for DDS Development Methodologies," International Journal of Information System and Supply Chain Management, 1 review. (December 4, 2012 January 4, 2013).
- Editorial Board Member, "Generalized Fuzzy Payback Period," The 7th World Multi-Conference on Systemics, Cybernetics and Informatics, 1 review. (December 5, 2012 December 6, 2012).
- Editorial Board Member, "Machine Learning Based Algorithm for Circularity Analysis," Internal Journal of Information and Decision Sciences, 1 review. (February 19, 2012 March 19, 2012).
- Editorial Board Member, "A Robust Optimization formulation for Container Linear Revenue Management," IME-2012-Conference, 1 review. (January 2, 2012 February 15, 2012).
- Ad Hoc Reviewer, Papers, "Bayesian Pricing Strategy for Information Goods," The International Journal of Operational Research, 1 review. (December 17, 2011 January 24, 2012).
- Editorial Board Member, "An Integrated Rational Decision Making and Inventory Management Model for Managing Supply Chain Risks in EPC," International Journal of Information System and Supply Chain Management, 1 review. (November 11, 2011 December 13, 2011).
- Editorial Board Member, "Lateral Collaboration in Semiconductor Industry Supply Networks," International Journal of Information Systems and Supply Chain Management, 1 review. (October 4, 2011 November 4, 2011).
- Ad Hoc Reviewer, Papers, "Topology and strategy for supply network robustness," International Journal of Production Economics. (August 18, 2011 October 18, 2011).
- Ad Hoc Reviewer, Papers, "Price and service for new and remanufactured products," International Journal of Production Economics, (August 14, 2011 October 14, 2011).
- Ad Hoc Reviewer, Papers, "Vendor managed inventory with consignment considering learning and forgetting effects," International Journal of Production Economics, 1 review. (July 16, 2011 October 11, 2011).
- Ad Hoc Reviewer, Papers, "Benifits of CPFR and VMI Collaboration Strategies in a Variable Demand Environment," Decision Science Institute 2011 Annual Meeting, 1 review. (April 1, 2011 May 1, 2011).
- Ad Hoc Reviewer, Papers, "Comparison of Production Policies in a Closed Loop Supply Chain," The 2011 DSI annual conference, 1 review. (April 1, 2011 May 1, 2011).
- Invited Manuscript Reviewer, "The 7th International Symposium conference proceeding," The 7th international Symposium on Management, Engineering and Informatics, 1 review. (April 5, 2011 April 25, 2011).
- Invited Manuscript Reviewer, "New Algorithms for Predictive Scheduling with Determined Terms of Milestone Achievement," The 7th International Symposium on Management, Engineering and Informatics:MEI, 1 review. (March 28, 2011).

- Editorial Board Member, "An Integrated rational decision making and inventory management model for managing supply chain risks in EPC: A power sector case," International journal of information and decision science, 1 review. (January 18, 2011 February 18, 2011).
- Invited Manuscript Reviewer, "Consignment Stock's with Learning and Forgetting Effects.," International Journal of Production Economics, 1 review. (September 7, 2010 November 4, 2010).
- Editorial Board Member, "Supply Chain Management Practices, Competitive Advantage and Organizational Performance: A Confirmatory Factor Model," International Journal of Information System and Supply Chain Management, 1 review. (September 2, 2010 September 26, 2010).
- Invited Manuscript Reviewer, "Sourcing Decision under Risks of Catastrophic Events Disruption," Transportation Research Part E, 1 review. (June 15, 2010 - August 16, 2010).
- Invited Manuscript Reviewer, "Priorizing Strategic Objectives by Lean Production Initiatives by Using the Method of Analytic Hierarchy Process," The 6th International Symposium on Management, Engineering and Informatics, 1 review. (June 5, 2010 June 27, 2010).
- Invited Manuscript Reviewer, "Can SCM Be a Discipline?: Comparing Academic and Practioner Perceptions on the Degree of Coherence," Decision Science Institute Conference Proceedings, 1 review. (May 5, 2010 June 1, 2010).
- Invited Manuscript Reviewer, "Implementation of Supply Chain Management Programs: An Exploratory Analysis," Decision Science Institute Conference Proceedings, 1 review. (May 1, 2010 June 1, 2010).
- Ad Hoc Reviewer, Papers, "Diffusion of Innovation A Comparison of Internet Cellular Phone Adoption in Jordan," The International Journal of Electronic Business, 1 review. (February 8, 2010 March 8, 2010).
- Editorial Board Member, "Using an interactive multi-objective method to find common weights for solving DEA problems.," International Journal of Information and Decision Sciences, 1 review. (July 15, 2009 September 9, 2009).
- Ad Hoc Reviewer, Papers, "Influences of a manufacturing firm's flexibility, partnering flexibility, and supplier's flexibility form a supply chain perspective.," Decision Science Instutite, 40th annual meeting, 1 review. (June 1, 2009 July 1, 2009).
- Ad Hoc Reviewer, Papers, "Inventory policy for a supply chainwith multiple types of customers, demand and review policies.," Decision Science Institute, 40th annual meeting, 1 review. (June 1, 2009 July 1, 2009).
- Editorial Board Member, "Identifying Buyers with Similar Seller Rating Models and Using Their Opnitions to Choose Sellers in Electronic Markets," International Journal of Information & Decision Sciences. (October 27, 2008 January 15, 2009).
- Editorial Board Member, "Research on the Administrative Cost Control Model Based on the Principal-agent Theory," International Journal of Information & Decision Sciences, 1 review. (March 16, 2008 April 8, 2008).
- Editorial Board Member, "W.A.T.C.H for a GPS Tag for 5 cents a Piece," The International Journal of Electronic Business, 1 review. (February 21, 2008 March 22, 2008).

- Invited Manuscript Reviewer, "A New Look At Fashion Brand Management," The Research Journal of Textile and Apprael, 1 review. (January 30, 2008 February 24, 2008).
- Editorial Board Member, "B2C E-Commerce in Malysia: Perceived Characteristics of Innovation and Trust Perspective," The Internal Journal of Electronic Business, 1 review. (December 18, 2007 January 15, 2008).
- Editorial Board Member, "Information Sharing and Supply Chain Performance: Understanding Complexity, Compatibility, and Processing," International Journal of Information System and Supply Chain Management, 1 review. (August 18, 2007 September 15, 2007).

### **General Service**

## College

- Student Org Advisor (Non-Professional Org), Operations & Supply Chain Club, Advisor. (November 1, 2012 Present).
- Committee Member, The International Programs Committee. (September 1, 2009 Present).
- Attendee, Meeting, MBA faculty retreat and Assessment meeting. (January 12, 2016 February 9, 2016).
- Committee Member, Journal Quality List Task Force. (September 2015 December 2015).
- Committee Member, Learning Assessment Committee. (February 2013 November 2013).
- Committee Member, The Promotion, Scholarship and Grant Committee, Member. (August 15, 2005 December 31, 2009).
- Voluntary teaching service, Tutoring session for MGMT 301 students. (February 21, 2009 May 2, 2009).

### **Department**

- Committee Member, Management Department Recuriting Committee, Member. (March 23, 2015 Present).
- Committee Member, Management Department Promotion Committee, Member. (March 1, 2012 Present).
- Interaction with Industry, Supply Chain Management Network. (October 10, 2013 October 30, 2014).
- Committee Member, Promotion Committee. (September 15, 2012 October 15, 2012).
- Committee Member, Department recruiting committee, Member. (October 30, 2011 March 16, 2012).
- Committee Member, Promotion Committee, Member. (September 15, 2010 October 1, 2010).
- Committee Member, Department Promotion Committee. (September 1, 2009 December 31, 2009).
- Committee Member, Supply Chain management Curriculum committee, Member. (November 1, 2008 December 15, 2008).

- Committee Member, Tenure Review Committee, Member. (September 15, 2008 November 1, 2008).
- Committee Member, Promoton and Tenure Review Committee, Member. (September 15, 2006 December 15, 2006).

#### **Professional**

- Reviewer, International Journal of Operational Research, Member. (March 15, 2013 Present).
- Reviewer, International Journal of Information Systems and Supply Chain Management, Member. (January 15, 2009 Present).
- Reviewer, International Journal of Information and Decision Sciences, Member. (January 15, 2008 Present).
- Task Force Member, Korea Fair Trade Commission, Member. (July 1, 2014 October 30, 2014).
- Tenure Reviewer for Another Institution, Tenure Review for University of Minnesota-Crookston, Member. (September 1, 2013 October 10, 2013).
- Session Chair, INFORMS Annual Meeting, Member. (November 7, 2007).

### The University of North Dakota

- Faculty Advisor, APICS Heartland District Student Case Competion, Faculty Advisor. (February 1, 2016 May 15, 2016).
- Faculty Advisor, General Motors / Wayne State University Supply Chain Case Competition, Faculty Advisor. (September 15, 2015 October 20, 2015).
- Student Org Advisor (Non-Professional Org), APICS Heartland District Student Case Competion, Advisor. (March 27, 2015 March 29, 2015).
- Committee Member, Senate Summer Session Committee. (May 8, 2009 May 15, 2012).
- Committee Member, Senate Scholarly Activities Committee, Member. (April 24, 2006 April 19, 2009).
- Special Institutional Assignment, Summer korean student exchange programm, Voluntary service but it was requested by UND provost office. (June 30, 2008 August 15, 2008).
- Committee Member, Senate Library Committee, Member. (April 24, 2006 April 19, 2008).